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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,689

07/17/2003

Ok-Kyung Cho

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EXAMINER

WINAKUR, ERIC FRANK

ART UNIT

PAPER NUMBER

3768

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/620,689

Applicant(s)

CHO ET AL.

Examiner

Eric F. Winakur

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> | 6) <input type="checkbox"/> Other: ____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :7/17/03; 11/24/03; 4/30/04; 7/6/04; 12/16/04; 3/14/05; 4/13/05; 6/6/05; 6/29/05; 8/11/05; 9/8/05.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 appears to either be incomplete, as the preamble is drawn to a blood sugar level measuring apparatus, but the claimed elements do not adequately define such a structure, or improperly set forth as an independent claim, when it should be dependent from claim 18.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Bowman et al. Bowman et al. teach an arrangement including a thermistor in a plate and a second thermistor spaced from the first by intervening layer 14 (Figure 1 and the description thereof).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

Art Unit: 3768

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1 - 13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 13 of U.S. Patent No. 6,954,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the patent. Thus, any apparatus meeting the limitations of the patent would necessarily meet those of the instant application.

7. Claims 1 - 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 9 - 12 of U.S. Patent No. 7,120,478. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the patent. Thus, any apparatus meeting the limitations of the patent would necessarily meet those of the instant application.

Art Unit: 3768

8. Claims 1 - 21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 - 22 of copending Application No. 11/169,777. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been within the skill level of the art at the time of the invention to determine a "metabolic characteristic" of interest, including blood sugar level, for measuring with the apparatus of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1 - 3, 8, 12, and 14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 6 of copending Application No. 11/059,607. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1 - 4, and 7 - 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 - 3, 7, and 8 of copending Application No. 10/765,986. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant

Art Unit: 3768

application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/008,360. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claim 12 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of copending Application No. 10/813,109. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims merely differ in that the instant application particularly details calculating parameters and then using the parameters in the equation, while the copending application does not provide these particular details. However, It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the claim of the copending application with a computing unit

Art Unit: 3768

performing these functions, as evaluating the equation of the copending application requires that these values be determined.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claim 12 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/992,689. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 1 - 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/879,231. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 3768

15. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/813,241. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/811,894. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/813,029. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are

Art Unit: 3768

broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/812,897. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

19. Claims 1 and 2 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/879,780. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the copending application. Thus, any apparatus meeting the limitations of the copending application would necessarily meet those of the instant application.

Art Unit: 3768

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuzoka and Fraden teach alternate sensing arrangement that include two or more spaced thermistors. Further, Applicant cites several references related to measurement of analyte concentrations. Of particular relevance, Oosta et al. (USPN 5,725,480) teach use of temperature measurements, among other factors, to calibrate optical glucose measurements based upon a subject's skin type. Cho (WO 01/28414) suggests determining glucose concentrations based upon analysis of temperature and spectral measurements. However, the prior art does not teach or suggest a blood sugar level measuring apparatus that includes a measuring arrangement that obtains a plurality of temperatures from a subject's body surface and a computing unit for converting measurement values provided from the temperature measurements and oxygen volume measurements into parameters which are used for computing a blood sugar level based on a stored relationship, in combination with the other claimed elements.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F. Winakur whose telephone number is 571/272-4736. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571/272-4740. The fax phone

Art Unit: 3768

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric F Winakur
Primary Examiner
Art Unit 3768